

FORM PTO-1190
(REV 10-98)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTORNEY'S DOCKET NUMBER

**TRANSMITTAL LETTER TO THE UNITED STATES
DESIGNATED/ELECTED OFFICE (DO/EO/US)
CONCERNING A FILING UNDER 35 U.S.C. 371**

00664/TL

U.S. APPLICATION NO. (If known, see 37 CFR 1.51)

09/647049INTERNATIONAL APPLICATION NO.
PCT/FR99/00678INTERNATIONAL FILING DATE
23 March 1999PRIORITY DATE CLAIMED
~~25~~ 23 March 1998
BACTITLE OF INVENTION COVERING PANELS, IN PARTICULAR FOR FLOORS, AND COVERING
FORMED BY SUCH PANELS

APPLICANT(S) FOR DO/EO/US

Miodrag NOVAKOVIC

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
4. ☒ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
 - a. ☐ is transmitted herewith (required only if not transmitted by the International Bureau).
 - b. ☒ has been transmitted by the International Bureau.
 - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
 - a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
 - b. ☐ have been transmitted by the International Bureau.
 - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
 - d. ☐ have not been made and will not be made.
8. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11. to 16. below concern document(s) or information included:

11. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☐ A **FIRST** preliminary amendment.
☐ A **SECOND** or **SUBSEQUENT** preliminary amendment.
14. ☐ A substitute specification.
15. ☐ A change of power of attorney and/or address letter.
16. ☒ Other items or information:

Form PCT/IB/308

Form PCT/IB/304

Form PCT/ISA/210

Express Mail Mailing Label No.:

EL 615 575 373 US

Date of Deposit:

September 25, 2000

I hereby certify that this paper and any papers identified herein is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231

Yolanda Usher
Yolanda Usher

09/64704

CALCULATIONS PTO USE ONLY

17. ☒ The following fees are submitted:

BASIC NATIONAL FEE (37 CFR 1.492(a)(1)-(5)):

534 Rec'd PCT/PTC 25 SEP 2000

Search Report has been prepared by the EPO or JPO \$840.00

International preliminary examination fee paid to USPTO (37 CFR 1.482) \$670.00

No international preliminary examination fee paid to USPTO (37 CFR 1.482) but international search fee paid to USPTO (37 CFR 1.445(a)(2)) \$760.00

Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO \$970.00

International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(2)-(4) \$ 96.00

ENTER APPROPRIATE BASIC FEE AMOUNT = \$ 840.00

Surcharge of \$130.00 for furnishing the oath or declaration later than ☐ 20 ☐ 30 months from the earliest claimed priority date (37 CFR 1.492(e)). \$

CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	
Total claims	13 - 20 =	0	\$ 18.00	\$
Independent claims	1 - 3 =	0	\$ 78.00	\$
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ 260.00	\$

TOTAL OF ABOVE CALCULATIONS = \$ 840.00

Reduction of 1/2 for filing by small entity, if applicable. Verified Small Entity Statement must also be filed (Note 37 CFR 1.9, 1.27, 1.28). \$

SUBTOTAL = \$ 840.00

Processing fee of \$130.00 for furnishing the English translation later than ☐ 20 ☐ 30 months from the earliest claimed priority date (37 CFR 1.492(f)). \$

TOTAL NATIONAL FEE = \$ 840.00

Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property + \$

TOTAL FEES ENCLOSED = \$ 840.00

Amount to be:	\$
refunded	
charged	\$

a. ☒ A check in the amount of \$840.00 to cover the above fees is enclosed.b. ☐ Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 06-1378. A duplicate copy of this sheet is enclosed.

NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

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New York, NY 10017-2023Tel. No. (212) 319-4900
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Date: September 25, 2000

SIGNATURE

THOMAS LANGER

NAME

27,264

REGISTRATION NUMBER

Applicant or Patentee: Miodrag NOVAKOVIC

Attorney's Docket No: From: LANGER

Serial or Patent No.: 09/647,049

Filed or issued: September 25, 2000

Title: COVERING PANELS, IN PARTICULAR FOR FLOORS, AND COVERING FORMED BY SUCH PANELS

STATEMENT (DECLARATION) CLAIMING SMALL ENTITY
STATUS (37 CFR 1.9(f) and 1.27(b) - INDEPENDENT INVENTOR

As a below named inventor, I hereby declare that I qualify as an independent inventor as defined in 37 CFR 1.9(c) for purposes of paying reduced fees under 35 USC 41(a) and 41(b) of Title 35, United States Code, to the Patent and Trademark Office with regard to the invention described in

1. ☐ the specification filed herewith; or

☒ application above identified; or

☐ patent above identified.

2. ☒ I have not assigned, granted, conveyed or licensed and am under no obligation under contract or law to assign, grant, convey or license, any rights in the invention.

3. ☐ Each person, concern or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey or license any rights in the invention and who is entitled to pay reduced fees under 35 USC 41(a) and 41(b), is listed below:

*NOTE: Separate qualified statements are required from each named person, concern or organization having rights to the invention averring to their status as small entities. (37 CFR 1.27)

FULL NAME

ADDRESS

☐ INDIVIDUAL

☐ SMALL BUSINESS CONCERN

☐ NONPROFIT ORGANIZATION

FULL NAME

ADDRESS

☐ INDIVIDUAL

☐ SMALL BUSINESS CONCERN

☐ NONPROFIT ORGANIZATION

FULL NAME

ADDRESS

☐ INDIVIDUAL

☐ SMALL BUSINESS CONCERN

☐ NONPROFIT ORGANIZATION

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

Miodrag NOVAKOVIC

NAME OF INVENTOR

NAME OF INVENTOR

NAME OF INVENTOR

X Novakovic
Signature of Inventor

Signature of Inventor

Signature of Inventor

X 28 OCTOBER 2000
Date

Date

Date



09/647049

--SUMMARY OF THE INVENTION--.

[illegible]

Page 2, before line 1, insert the heading

--BRIEF DESCRIPTION OF THE DRAWINGS--.

Between lines 15 and 16, insert the heading

--DETAILED DESCRIPTION OF THE DRAWINGS

IN THE CLAIMS

Replace the heading "CLAIMS" with --I Claim--.

Please amend claims 3 and 5-13 as follows:

Claim 3, line 1, change "either of claims 1 or 2" to

--claim 1--.

Claim 5, line 1, change "either of claims 3 or 4" to

--claim 3--.

Claim 6, line 1, change "any of the preceding claims" to

--claim 1--.

Claim 7, line 1, change "any of the preceding claims" to

--claim 1--.

Claim 8, line 1, change "any of the preceding claims" to

--claim 1--.

Claim 9, line 1, change "any of claims 1 through 8" to
--claim 1--.


Claim 10, line 1, change "any of claims 1 through 9" to
--claim 1--.

Claim 11, line 1, change "any of claims 3 through 11" to
--claim 3--.

Claim 12, line 1, change "any of claims 3 through 10" to
--claim 3--.

Claim 13, line 3, change "any of claims 1 through 12" to
--claim 1--.

Respectfully submitted,


Thomas Langer
Reg. No. 27,264

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COVERING PANELS, IN PARTICULAR FOR FLOORS, AND COVERING
FORMED BY SUCH PANELS

The invention relates to a covering panel, particularly for floors, and a covering formed by such panels.

5 The known coverings of this type, in the form of parquet, tiling or the equivalent, require either an attaching, for example by adhesive bonding, of the panels that constitute them to a laying surface that has already been carefully leveled, or a joining of each of the panels to one another by means of a tongue-and-groove system. These coverings make it possible to produce a laid floor that is homogeneous and perfectly horizontal, but they do not make it possible to correct flatness defects, resulting in creakiness and instability. Nor do they provide demountability or access to a precise location underneath the covering, for example to a system of fluid conduits or electrical cables installed under the covering, without destroying the latter.

The object of the invention is to offer a covering panel and a covering that eliminate these drawbacks.

20 To achieve this object, a covering panel according to the invention is characterized in that it comprises a plurality of tiles individually attached to a supporting plate having the dimensions of the panel and juxtaposed on the latter so that when aligned in the same plane, the adjacent tiles are in contact with one another along their edges and in that the supporting plate is made of a material that is flexible and elastically compressible in the direction of its thickness

25 According to one characteristic of the invention, a tile as mentioned above comprises an upper covering plate, made of a material with low flexural strength, and a lower, rigid supporting plate made of a material with high flexural strength.

30 The covering according to the invention is characterized in that it is formed by the contiguous juxtaposition of covering panels according to the invention on a laying surface.

The invention will be better understood, and its other objects, characteristics, details and advantages will become clearer in the following explanatory description, written in reference to the attached schematic drawings, given only as an example illustrating just one embodiment of the invention and in which:

Fig. 1 is an exploded view, in perspective, of a covering panel according to the present invention.

Fig. 2 is a view in perspective of a covering panel according to the invention in the folded state.

Fig. 3 is a sectional view of a floor covering according to the invention, with one panel laid and another in the process of being laid.

Fig. 4 is a view similar to Fig. 2 that shows another embodiment of the panel according to this Fig. 2.

As seen in the figures, a covering panel 1 according to the invention has a multi-layered structure and comprises a plurality of tiles 2 that are individually attached, advantageously by adhesive bonding, to a plate 3 made of a flexible material, compressible in the direction of its thickness and having the same dimensions as the panel. The various tiles 2 are juxtaposed on the flexible supporting plate in such a way that, when aligned in the same horizontal plane, the adjacent tiles are advantageously in contact with one another along their edges 5. As a result of this contact of the tiles 2 with one another on the common flexible supporting plate 3, the panel 1 can constitute, in the horizontal state, an assembly that is rigid against the forces acting on its upper surface.

On the other hand, given that the tiles 2 are aligned by their edges, as seen in Figs. 1 and 2, the panel 1 can be folded under the effect of forces acting on its lower surface. Fig. 2 shows the plate 1 in the folded state obtained by folding the flexible plate along a fold line 7, which extends to the aligned sides or edges 5 of the tiles 2 juxtaposed in the direction of this line. In other words, the tiles 2 are articulated as a

result of the flexible plate 3, which thus constitutes a means of articulation.

Each tile 2 is composed of two superposed plates, a rigid upper covering plate 8, if necessary made of a material with low flexural strength, and a lower supporting plate 9 on which the covering plate 8 is attached, for example by adhesive bonding, and which is made of a material with high flexural strength. The various tiles 2 are attached to the flexible supporting plate 3 by their lower plate 9.

The upper covering plate 8 can be a plate of parquet, as in the example represented, formed by a certain number of parallel strips of parquet 10, or a plate of tile, stone, marble or the like.

The lower tile plates 9 are generally made of sheet metal or stainless steel, but could also be made of wood, wood composite or other rigid composite materials having high flexural strength. In essence, it is because of the rigidity and the strength of the plates 9 that the covering plates 8 are protected against flexural forces and thus against any risk of fracture.

The one-piece flexible supporting plate 3 is advantageously made of foam, cork or the equivalent. In addition to its function of supporting the tiles 2, because of its deformability in the direction of its thickness, and as a function of the latter, it makes it possible to correct flatness defects in the laying surface of the panels, indicated by 12. The plate 3 can also serve as a layer of acoustic or thermal insulation, depending on the choice of the material that constitutes it.

As illustrated in Fig. 3, a floor covering can be formed simply by juxtaposing panels 1 contiguously on the laying surface 12, i.e. the floor. Because of the flexibility of the panels, the surface does not need to be perfectly flat, given that the irregularities of the surface will be compensated by the compressible flexible plates 3 and by the ability of the panels to be deformed under the effect of forces acting from below, as a result of the articulated mounting of the tiles 2 on the plate 3.

Given that the panels 1 are simply juxtaposed on the floor 12 without mutual joining means such as tongue-and-groove means and without being fixed to the floor, they can be easily removed. Thus, the panels according to the invention make it possible to
5 access, for example, a system of electrical cables or fluid conduits installed in the floor or in a sub-floor structure.

Fig. 4 shows a variant of embodiment of a panel according to the invention. In this version, the covering is made in the form of a plurality of juxtaposed strips 14, if necessary made of a
10 flexible material, whose length is equal to the length of the edge of the panel 1 to which this strip is parallel. On the other hand, the rigid plate layer 9 is made as shown in Figs. 1 through 3. Consequently, several rigid plates 9 are juxtaposed underneath a strip 14 in the longitudinal direction of the latter. As
15 before, the plates 9 are laid on a plate 3 made of flexible material. Thus, the joining lines of two adjacent strips 14 constitute lines of articulation that allow the panel to be folded, as seen in Fig. 4.

It is clear from the description of the panels and the floor coverings that can be produced by juxtaposing such panels that the invention offers many advantages, such as an excellent
20 ability to adapt to laying surfaces, even irregular ones, an easy and fast installation of the panels, and the possibility of easy demounting. The covering according to the invention is compatible with other flexible coverings such as a carpet or a vinyl floor covering with embossed tiles. In fact, the covering according to
25 the invention is very easy to lay over these coverings.

Generally, the demountable and therefore replaceable panels can be laid on any existing support such as concrete screed, tile
30 flooring, parquet, flooring covered with a carpet or plastic covering, technical flooring, batten flooring or the equivalent. In spite of its final rigid quality, the covering according to the invention, because of its articulation, adapts to any support no matter what its degree of flatness, since the articulation of
35 the tiles that compose it allows it to mold itself to the surface

of the floor on which is laid. The articulated panels according to the invention can have variable sizes and shapes in accordance with the requirements of the rooms intended to be equipped with them, such as offices, business, professional and display spaces, or private residences.

CLAIMS

1. Covering panel, particularly for a floor, characterized in that it comprises a plurality of tiles (2) individually
5 attached to a supporting plate (3) having the dimensions of the panel, and juxtaposed on the latter in such a way that when aligned in the same plane, the adjacent tiles (2) are in contact with one another along their edges (5), and in that the
10 supporting plate (3) is made of a flexible material that is elastically compressible in the direction of its thickness.

2. Panel according to claim 1, characterized in that the tiles (2) are attached on the supporting plate (3) in such a way that their edges (5) are aligned.

3. Panel according to either of claims 1 or 2, characterized in that a tile (2) comprises an upper covering plate (8) and at least one lower rigid supporting plate (9), made of a material with high flexural strength and on which the upper
20 plate is attached.

4. Panel according to claim 3, characterized in that a covering plate (8) is a plate with low flexural strength, such as a plate of parquet, tile, stone, marble or the like.

5. Panel according to either of claims 3 or 4, characterized in that the lower supporting plate (9) of a tile (2) is a plate such as a plate of sheet metal, stainless steel, wood, wood composite or another composite material.

6. Panel according to any of the preceding claims, characterized in that the supporting plate (3) is advantageously a plate made of foam, cork or the like.

7. Panel according to any of the preceding claims,

characterized in that the tiles (2) are attached on the flexible supporting plate (3) by adhesive bonding or the like.

8. Panel according to any of the preceding claims, characterized in that the individual mounting of the tiles (2) on the flexible supporting plate (3), and the compressibility of the latter, constitute means of compensating for irregularities or flatness defects of the surface (12) on which the panels (1) are laid.

9. Panel according to any of claims 1 through 8, characterized in that the supporting plate is flexible so as to allow the panel to fold along the lines of alignment of the edges of the tiles.

10. Panel according to any of claims 1 through 9, characterized in that it constitutes an assembly that is rigid in the approximately flat state against the forces acting on the top surface of the panel.

11. Panel according to any of claims 3 through 11, characterized in that a tile comprises an upper covering plate (8) disposed on a rigid plate (9).

12. Panel according to any of claims 3 through 10, characterized in that a tile (14) is formed by a strip of covering extending parallel to one edge of the panel (1) and whose length corresponds to the length of said edge, and attached on several rigid plates (9) juxtaposed in the direction of the length of the strip on the supporting plate (3), several strips being juxtaposed on the supporting plate (3).

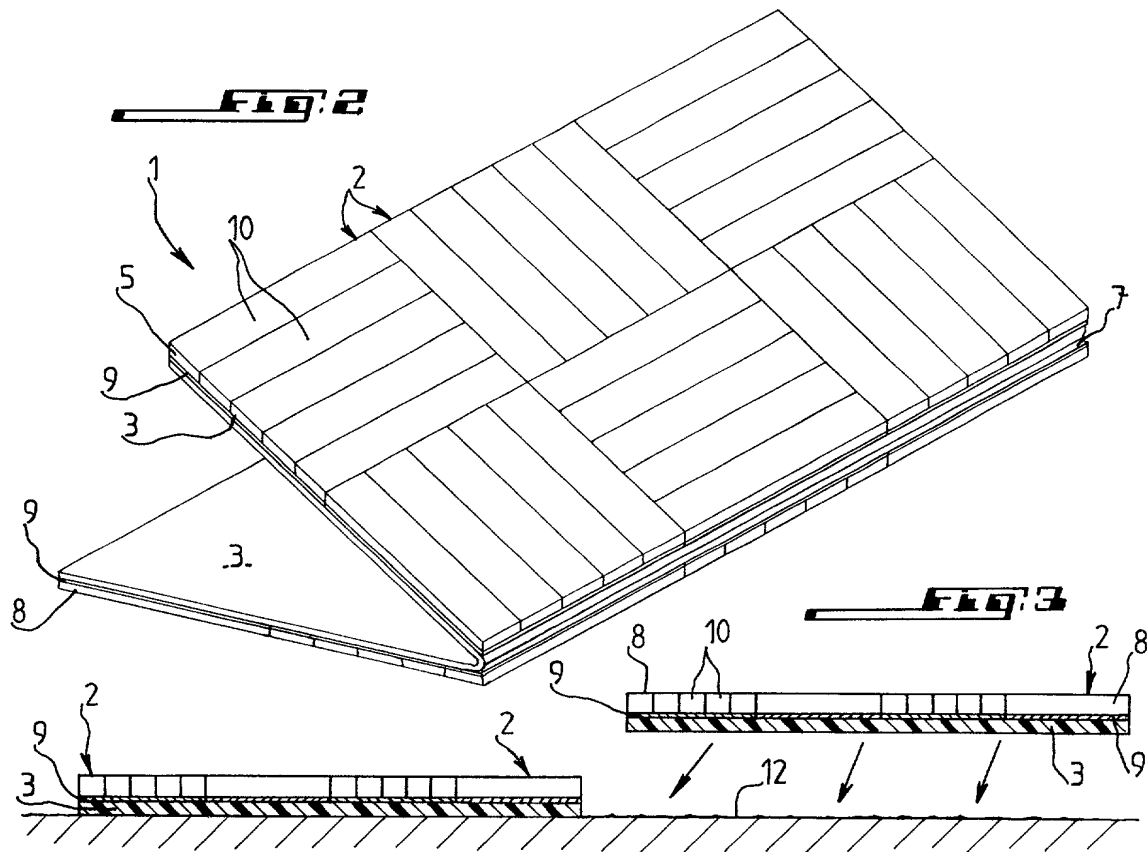
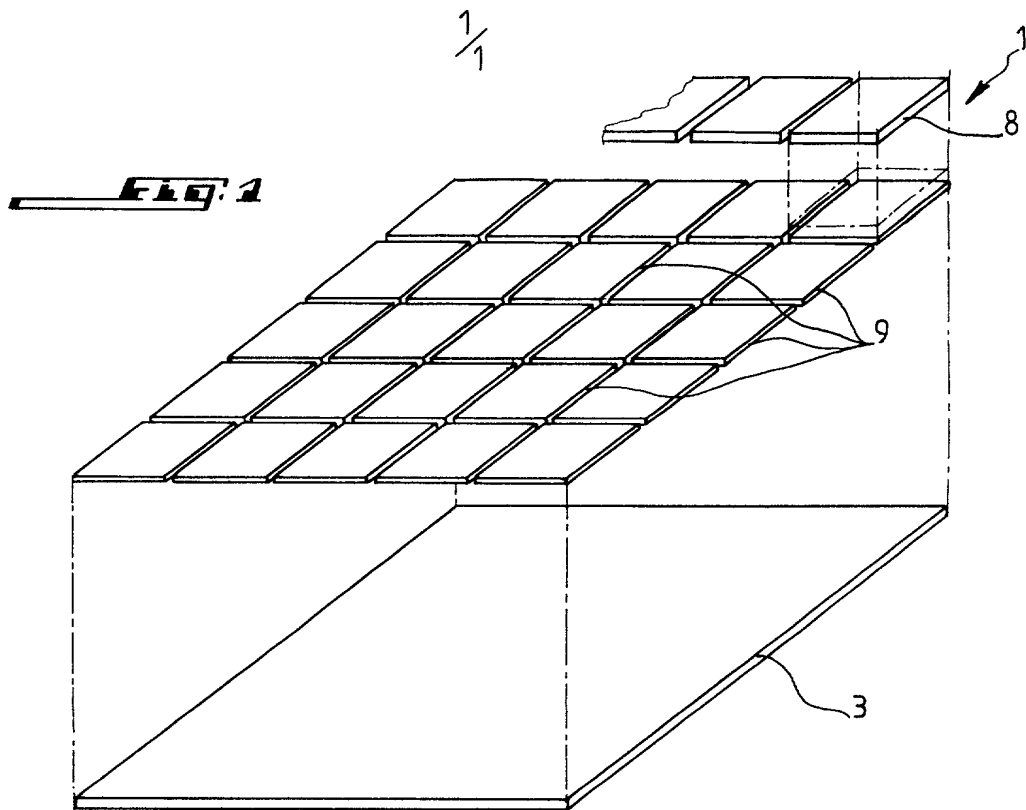
13. Covering, particularly for a floor, characterized in that it is formed by the contiguous juxtaposition of panels (1) according to any of claims 1 through 12 on a laying surface (12).

ABSTRACT OF THE DISCLOSURE

A covering panel, in particular for floors, comprising a plurality of tiles (2) individually fixed on a supporting plate (3) having the dimensions of the panel and juxtaposed thereon.

- 5 When aligned in the same plane with each other, the adjacent tiles (2) are in mutual contact by their edges (5). The supporting plate (3) is made of a pliable material elastically compressible in its thickness.

09/647049



APPLICATION FOR UNITED STATES LETTERS PATENT

PCT Declaration and Power of Attorney (35 U.S.C. 371(c)(4))

PCT Application - United States Designated Office

As a below named inventor, I declare that

My residence, post office address and citizenship are as stated below next to my name; I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: COVERING PANELS, IN PARTICULAR FOR FLOORS, AND COVERING FORMED BY SUCH PANELS

described and claimed in International Application number PCT/FR99/00678
and, if it was amended, as amended on

filed 23 March 1999

U.S. Patent Application Serial No. 09/647,049 filed September 25, 2000

I have reviewed and understand the contents of said specification, including claims.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR §1.56.

I claim priority benefits under 35 USC §119 of: (i) any foreign application(s) for patent or inventor's certificate listed below; or (ii) any United States provisional application(s) listed below; and have also identified below any foreign application(s) for patent or inventor's certificate, or PCT international application having a filing date before that of the application(s) on which priority is claimed.

COUNTRY	APPLICATION NUMBER	DATE (day, month, year)	PRIORITY CLAIMED
FRANCE	98 03 696	25 March 1999	yes <u>X</u> no <u> </u>
			yes <u> </u> no <u> </u>

Thereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

I appoint the following attorneys to prosecute this application and to transact all business in the U.S. Patent & Trademark Office connected therewith: Leonard Holtz, Reg. No. 22,974; Herbert Goodman, Reg. No. 17,081; Thomas Langer, Reg. No. 27,264; Marshall J. Chick, Reg. No. 26,853; Richard S. Barth, Reg. No. 28,180; Douglas Holtz, Reg. No. 33,902; and Robert P. Michal, Reg. No. 35,614.

CORRESPONDENCE AND CALLS TO:

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INVENTOR: SIGNATURE

DATE

RESIDENCE AND POST OFFICE ADDRESS

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Type:	Citizen of:	Post Office Address:
Sign:	Date:	Residence: (City & Country)
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